



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/666,047 | 09/18/2003 | Nobuhiro Ozawa | 216.011 | 6580 |

7590

04/04/2006

BOYLE, FREDRICKSON, NEWHOLM, STEIN & GRATZ, S.C.
Suite 1030
250 Plaza, 250 East Wisconsin Avenue
Milwaukee, WI 53202

EXAMINER

SCHWARTZ, CHRISTOPHER P

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|-------------------------------------|--|
| Office Action Summary | Application No. 10/666,047 | Applicant(s) OZAWA ET AL. | |
| | Examiner Christopher P. Schwartz | Art Unit 3683 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

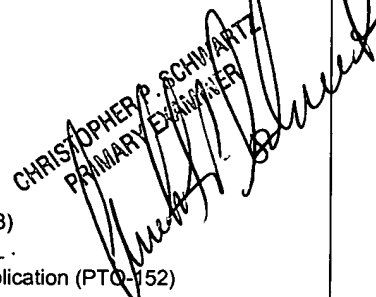
- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER



DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 3, 2006 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1,2 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. .

Applicant's state in the specification (and argue in their remarks) that the invention comprises a coil spring having linear spring characteristics placed inside of a case having spaced walls/plates set "about 1.5-2 times" larger than the diameter of the coil spring". But that when the coil spring is deformed a non-linear spring property is obtained when the coil spring is urged by a spring urging member. See page 5 of their specification.

In the several embodiments (see figures 8-13) there appears to be nothing unique about the spring urging member, or the construction of the case, which contains the coil spring, as compared to almost identical constructions in the prior art of record. It therefore becomes unclear how applicant's coil spring can exhibit these non-linear characteristics while that of the other prior art of record having virtually the same construction (such as, but not limited to, Yamada) does not.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada '285 in view of Watanabe '225 and either JP 9-21440 or Komura et al.

Regarding claims 1 and 2 Yamada shows a device similar to that of the elected embodiment, as easily seen in the drawings, but lacks the specifics of the characteristics of the spring.

Springs with linear and non-linear properties are notoriously well known in the art. The examiner takes official notice that this is the case. Nevertheless the reference to Watanabe and Komura et al. have been cited to provide a general teaching of this idea.

The Japanese reference to '440 is relied upon in a similar fashion as explained in the NPL document submitted by applicants, presumably a determination of the patentability of applicant's claims from the foreign patent Office. Please see figures 2 and 3 and note the deformation of the spring in figure 3.

It would have been obvious to the ordinary skilled worker in the art to have substituted a spring having linear and non-linear properties, or non-linear properties, for the spring of Yamada simply dependent upon the damping characteristics desired from the absorber. The same rational may be used for setting the claimed dimensional relationship of the spring case 31 to that of the spring—and possibly to prevent unwanted noise due to contact of the spring with the case.

Response to Arguments

7. Applicant's arguments with respect to claims 1-2 have been considered but are not persuasive. In light of the discussion in paragraph 3 above the examiner maintains the position that the device of Yamada, due to it's similar case construction—which may be varied -- (see figures 1, 9, 14), is capable of being modified to exhibit non-linear

spring characteristics. First, a non-linear coil spring could simply be substituted for the spring of Yamada dependent upon the spring characteristics desired. This would then have the effect of meeting applicant's broad claimed limitations. Second, as seen in figure 3 of JP '440 showing a spring within a case in similarly constructed version to that of Yamada, the spring of Yamada is certainly capable of deforming such that "the coil spring is brought into contact with the back and front side plates of the coil spring case at curved portions thereof". According to applicant's analysis this spring would then exhibit 'non-linear' spring characteristics. Either way applicants claimed limitations are rendered obvious or are inherently met.

It is unclear how the amended limitations to claim 1 add anything new in the way of defining over the prior art applied. The spring was previously claimed to be "...deformed along a curve so as to have a non-linear property, a distance between the right and left side plates of the case being set larger than an outer diameter of the spring and a distance..." Applicant's added limitations seem to simply state the obvious upon deformation of the spring (as previously claimed).

Applicant's cited case law is noted. However in light of the remarks above it is believed to be moot.

Applicant's representative requested the examiner to 1) submit documentary evidence in support of his position suggesting modifying the linear spring of Yamada with Watanabe or Komura references or 2) submit a declaration averring that he has personally seen disclosures teaching the interchangeability of linear and non-linear springs.

In response to request 1) the supplied reasoning in the obvious statement above—drawn mainly from common sense—should be enough. Further, the references to Watanabe or Komura were previously supplied to teach this. In response to request 2) please see the newly cited reference to Tachikawa et al. See figure 6A. See the column 1 lines 11-17 and column 4 lines 26,27 and lines 65-68. This reference teaches a linear coil spring that can be used in a car suspension. The reference to Watanabe (previously cited) shows non-linear coil springs used in car suspensions.

As should have been readily apparent to applicants representative in any case the two springs are obviously interchangeable.

Conclusion

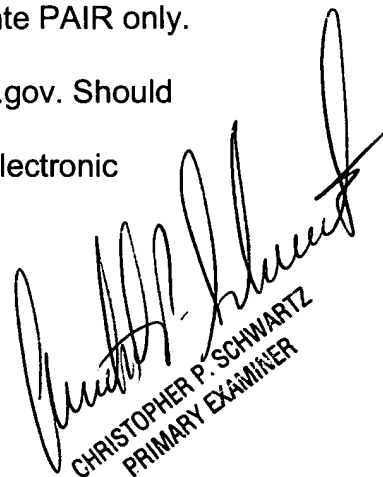
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 571-272-7123. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cps
3/31/06



CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER